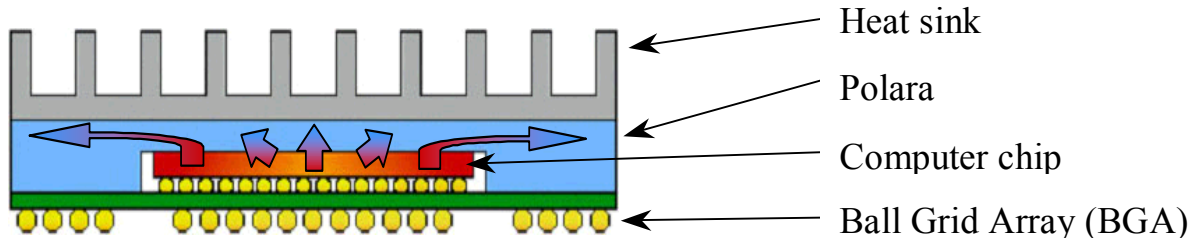
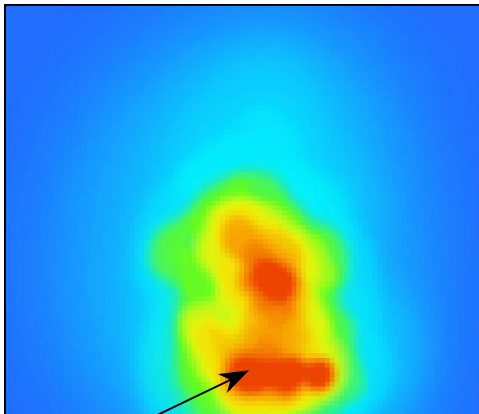


Polara™ Heat Spreaders for Microprocessors



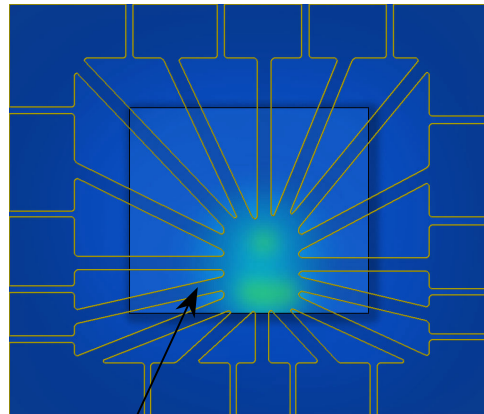
4-5°C (~7-9°F) reduction
over AlSiC, Cu-W, Cu-Mo heat spreaders

Bare die flip chip processor



Hot spots in processor core

Processor with Polara heat spreader



Polara heat spreader with Thermal Raceways anisotropically pumping heat from hot spots to the spreader perimeter

Polara heat spreaders provide:

- Vectorized heat transfer from localized hot spots
- CTE matching Silicon allowing eutectic die attach
- 1/3 the cost of AlSiC and Cu-Mo, Cu-W composite spreaders